CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

No.: CQCE/BBMP/DM/16/2020-2021 Date 19.09.2020

GRADATION FOR WMM

Client : Executive Engineer, RR Nagar Division,BBMP, Bangalore.
Agency : Sri.Damodar Manjunath, Contractor, Bangalore.
Name of Work :Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01), BBMP, Bangalore
IS Code: :IS 2386 (Part 1):1963(RA 2011)
Date of Testing 17.09.2020 to 19.09.2020
Material Type : Wet Mix Macadam

Oven Dry.Wt, grar 10000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Requirement as per MORTH 5th edition table no 400.13
53	0	0	0	100	100
45	214	214	2.1	97.9	95-100
22.4	2146	2360	23.6	76.4	60-80
11.2	2158	4518	45.2	54.8	40-60
4.75	1763	6281	62.8	37.2	25-40
2.36	1294	7575	75.8	24.3	15-30
0.600	925	8500	85.0	15.0	8-22
0.075	1036	9536	95.4	4.6	0-5

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ

ISO 9001:2000 CERTIFIED

CQCE/BBMP/DM/16/2020-2021

GRADATION FOR WMM

Date 19.09.2020

Client : Executive Engineer, RR Nagar Division,BBMP, Bangalore.
Agency : Sri.Damodar Manjunath, Contractor, Bangalore.
Name of Work :Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01), BBMP, Bangalore
IS Code: :IS 2386 (Part 1):1963(RA 2011)
Date of Testing 17.09.2020 to 19.09.2020
Material Type : Wet Mix Macadam

Oven Dry.Wt, grar 10000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Requirement as per MORTH 5th edition table no 400.13
53	0	0	0	100	100
45	218	218	2.2	97.8	95-100
22.4	2163	2381	23.8	76.2	60-80
11.2	2168	4549	45.5	54.5	40-60
4.75	1758	6307	63.1	36.9	25-40
2.36	1245	7552	75.5	24.5	15-30
0.600	985	8537	85.4	14.6	8-22
0.075	1045	9582	95.8	4.2	0-5

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

CQCE/BBMP/DM/16/2020-2021

Date 19.09.2020

GRADATION FOR WMM

Client : Executive Engineer, RR Nagar Division,BBMP, Bangalore.
Agency : Sri.Damodar Manjunath, Contractor, Bangalore.
Name of Work :Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01), BBMP, Bangalore
IS Code: :IS 2386 (Part 1):1963(RA 2011)
Date of Testing 17.09.2020 to 19.09.2020
Material Type : Wet Mix Macadam

Oven Dry.Wt, grar 10000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Requirement as per MORTH 5th edition table no 400.13
53	0	0	0	100	100
45	205	205	2.1	98.0	95-100
22.4	2196	2401	24.0	76.0	60-80
11.2	2144	4545	45.5	54.6	40-60
4.75	1854	6399	64.0	36.0	25-40
2.36	1325	7724	77.2	22.8	15-30
0.600	974	8698	87.0	13.0	8-22
0.075	1123	9821	98.2	1.8	0-5

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

CQCE/BBMP/DM/16/2020-2021

Date 19.09.2020

GRADATION FOR WMM

Client : **Executive Engineer, RR Nagar** Division,BBMP, Bangalore.
Agency : **Sri.Damodar Manjunath,** Contractor, Bangalore.
Name of Work :Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01), BBMP, Bangalore
IS Code: :IS 2386 (Part 1):1963(RA 2011)
Date of Testing 17.09.2020 to 19.09.2020
Material Type : Wet Mix Macadam

Oven Dry.Wt, grar 10000

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Requirement as per MORTH 5th edition table no 400.13
53	0	0	0	100	100
45	215	215	2.2	97.9	95-100
22.4	2165	2380	23.8	76.2	60-80
11.2	2178	4558	45.6	54.4	40-60
4.75	1898	6456	64.6	35.4	25-40
2.36	1254	7710	77.1	22.9	15-30
0.600	969	8679	86.8	13.2	8-22
0.075	1145	9824	98.2	1.8	0-5

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

Job No.: CQCE/BBMP/DM/16/2020-2021

Date: 17.09.2020

Aggregate Impact Value

Client	**: Executive Engineer, RR Nagar Division, Bangalore.**
Agency	**: Sri.Damodar Manjunath, Contractor, Bangalore.**
Name of the Work	:Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01)
IS Code:	IS 2386 (Part 4):1963(RA 2011)
Type of Mix	Wet Mix macadam
Date of Testing	17.09.2020

Sl No.	Details	Test No. 1	Test No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	88	86	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	297	299	
4	Aggregate Impact value = percent fines 100* (W_2/W_1)%	22.86	22.34	22.60

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%(As per MORTH Specication table 400.12)

Note:

→ This test report should not be reproduced except in full, without written approval of the labc
→ The results indicated above are based on the tests carried out on the samples received in the
→ Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

Ref. No: CQCE/BBMP/DM/16/2020-2021

Date: 17.09.2020

Aggregate Impact Value

Client	: Executive Engineer, RR Nagar Division, Bangalore.
Agency	: Sri.Damodar Manjunath, Contractor, Bangalore.
Name of the Work	:Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01)
IS Code:	IS 2386 (Part 4):1963(RA 2011)
Type of Mix	Wet Mix macadam
Date of Testing	17.09.2020

Sl No.	Details	Test No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	87	89	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	298	296	
4	Aggregate Impact value = percent fines 100* (W_2/W_1)%	22.60	23.12	22.86

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%(As per MORTH Specication table 400.12)

Note:

→ This test report should not be reproduced except in full, without written approval of the labc
→ The results indicated above are based on the tests carried out on the samples received in the
→ Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

Lab No.: CQCE/BBMP/DM/16/2020-2021

Date: 17.09.2020

Aggregate Impact Value

Client	: Executive Engineer, RR Nagar Division, Bangalore.
Agency	: Sri.Damodar Manjunath, Contractor, Bangalore.
Name of the Work	:Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01)
IS Code:	IS 2386 (Part 4):1963(RA 2011)
Type of Mix	Wet Mix macadam
Date of Testing	17.09.2020

Sl No.	Details	Test No.		Average
		1	2	
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	385	385	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	85	83	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	300	302	
4	Aggregate Impact value = percent fines 100* (W_2/W_1)%	22.08	21.56	21.82

Comments:

→ Maximum allowable Aggregate Impact value for Wet mix Macadam is 30%(As per MORTH Specication table 400.12)

Note:

→ This test report should not be reproduced except in full, without written approval of the labc
→ The results indicated above are based on the tests carried out on the samples received in the
→ Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

CQCE/BBMP/DM/16/2020-2021

17.09.2020

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	: Executive Engineer, RR Nagar Division, BBMP, Bangalore.
Agency	: Sri.Damodar Manjunath, Contractor, Bangalore.
Name of Work	:Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01), BBMP, Bangalore
BIS code:	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	17.09.2020

Sl no	Test	1	2	3	Requirements as per MORTH 5th edition table no 400.12
1	Flakiness Index %	10.2	9.8	9.9	
2	Elongation Index %	11.3	10.5	10.7	Combined Flakiness & Elongation index Max 35%
	Combined Flakiness & Elongation index	21.50	20.3	20.6	

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory
→ The results indicated above are based on the tests carried out on the samples received in the laboratory
→ Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

CQCE/BBMP/DM/16/2020-2021

17.09.2020

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	: Executive Engineer, RR Nagar Division, BBMP, Bangalore.
Agency	: Sri.Damodar Manjunath, Contractor, Bangalore.
Name of Work	:Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01), BBMP, Bangalore
BIS code:	IS 2386(Part 1) 1963 (RA 2011)
Type of Mix	Wet Mix Macadam
Date of Testing	17.09.2020

Sl no	Test	1	2	3	Requirements as per MORTH 5th edition table no 400.12
1	Flakiness Index %	9.9	9.6	10.4	
2	Elongation Index %	10.5	10.7	9.3	Combined Flakiness & Elongation index Max 35%
	Combined Flakiness & Elongation index	20.40	20.3	19.7	

Note:

→ This test report should not be reproduced except in full, without written approval of the laboratory
→ The results indicated above are based on the tests carried out on the samples received in the laboratory
→ Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner

CIVIL QUALITY CONSULTANTS & ENGINEERS

(Buildings Geo-Tech & Highway Materials Testing Laboratory)
An ISO 9001: 2015 Certified Company
NABL Accredited As Per ISO/IEC : 17025:2005 Laboratory

JAS-ANZ
ISO 9001:2000 CERTIFIED

CQCE/BBMP/DM/16/2020-2021

Date 19.09.2020

ATTERBERG LIMITS TEST FOR WMM

Client : **Executive Engineer, RR Nagar** Division,BBMP, Bangalore.
Agency : **Sri.Damodar Manjunath,** Contractor, Bangalore.
Name of Work :Comprehensive Development of roads and drains in ward no. 16, Rajarajeshwarinagara Assembly Constituency under Package-2019-20 RRN-DIV-(01),BBMP, Bangalore
IS Code: IS 2720(Part 5):1985
Date of Testing 17.09.2020 to 19.09.2020
Material Type : Wet Mix Macadam

Sl. No.	Particulars	Test Results	Requirement as per MORTH 5th edition Cl.406.2.1.2
1	Liquid Limit	20.50	-
2	Plasticity Index, %	Non Plastic	6.0% Maximum.

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 30 days from the date of testing.

Asst. Executive Engineer
Yeshwanthpura Sub-Division
Bruhat Bangalore Mahanagara Palike

For CIVIL QUALITY CONSULTANTS & ENGINEERS

Authorised Signatory

Office & Laboratory : # 133, Bhuvaneshwarinagar, Dodda Basti Main Road, Bangalore - 560 056.
e-mail: civilqualityconsultants@gmail.com Ph: 080-23240644 / Mob: 8553518550

Scanned with CamScanner